

Via Electronic Mail

May 17, 2019

CHIEF INSPECTOR OF MINES  
MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES  
C/O MINING DIVISION, SOUTHWEST REGION  
PO BOX 9395 STN PROV GOVT  
VICTORIA BC, V8W 9M9

Re: Comments on Notice of Application for a Permit Approving the Amended Mine Plan and  
Reclamation Program for the Giant Copper Property

Dear Chief Inspector of Mines:

In response to Imperial Metals' Notice of Application (Application) published on April 18, 2019, we are writing to express our opposition to any further resource extraction and associated activities in the upper Skagit watershed, including the Silverdaisy Area addressed in the Application. We request you deny the Application because of its conflict with the intent of the High Ross Treaty and Agreement; the ecological significance of the Skagit River Watershed; the impacts of the proposed activities on the environment, cultural resources, and recreation; and the major errors and omissions in the Application. These reasons are described more fully below.

### **CONFLICTS WITH THE HIGH ROSS TREATY AND BRITISH COLUMBIA—SEATTLE AGREEMENT**

As stated by City of Seattle's Mayor Durkan in communications with Premier Horgan, the recent logging and currently proposed mining activity is inconsistent with the spirit and intent of the 1984 High Ross Treaty (Treaty) between the United States (US) and Canada and the concurrent British Columbia – Seattle Agreement (Agreement). Recognizing the unique ecological and recreational values of the Skagit Watershed, one of the main purposes of the Treaty was to maintain the *ecological integrity of the watershed*. Mining exploration in the Silverdaisy Area directly contradicts this. Furthermore, our Agreement with British Columbia (BC) established the Skagit Environmental Endowment Fund (Fund) with annual contributions made by both BC and the City of Seattle (Seattle). The primary purposes of the Fund are:

- *To conserve and protect wilderness and wildlife habitat;*
- *To enhance recreational opportunities;*
- *To acquire mineral and timber rights consistent with conservation and recreation purposes.*

The Agreement also established the international Skagit Environmental Endowment Commission (SEEC) to administer the Fund. The Canada and US commissioners of SEEC are appointed by the BC Premier

and Mayor of Seattle, respectively. Consistent with its purpose since 1984, SEEC has been actively pursuing acquisition of the subject mineral rights in order to *protect* the ecological value of the associated land and incorporate it into one of the adjacent parks. This has been done with the express knowledge and encouragement of the BC and Seattle governments. The subject mining activity in the Silverdaisy Area would degrade the ecological value of the land that SEEC has been striving to acquire and protect. These actions would also delay or prevent SEEC from acquiring the mineral rights and incorporating the land into the surrounding parks.

## **IMPACTS TO THE ENVIRONMENT**

The Skagit River is the largest river system draining into the Puget Sound and supports some of the most abundant and diverse populations of salmonids in the region. Approximately one-third of all wild salmon in the Puget Sound come from the Skagit River. The Skagit River provides the cool, clean water necessary to support the most productive stocks of Chinook, pink, and chum salmon and bull trout in the Pacific Northwest. It supports the largest chum salmon run in the conterminous US and the second largest pink salmon run in Washington state. Chinook salmon, bull trout, and steelhead are currently classified as "threatened species" under the US Endangered Species Act (ESA).

The fish populations in the Skagit River and the wildlife species that depend on them are important to the regional economy and Native American tribes on both sides of our shared border. For example, the Upper Skagit, Sauk-Suiattle and Swinomish tribes have treaty rights for fishing in the Skagit River. The Chinook salmon of the Skagit River are also critical to the survival of the endangered southern resident killer whales.

In addition to the aquatic resources, the Skagit River watershed supports the largest overwintering population of bald eagles in the conterminous US and the highest number and diversity of raptors in North America. The watershed, including the Silverdaisy Area, serves as a critical wildlife corridor for wide-ranging species of wildlife, many of which are sensitive to human activity, including grizzly bears, wolverines, mountain goats, elk, moose, cougar, and lynx.

Our main concern with respect to environment is that the potential direct and indirect impacts associated with approval the Application would be harmful to these unique fish and wildlife populations and pose a significant threat to the water quality of the upper Skagit River and the people who depend on it. Metals released from exploratory drilling, particularly copper, are highly toxic to salmon even at low quantities. As it stands, the current Application does not provide sufficient detail to assess the full extent of these potential impacts or, how or if, they could be rectified. Furthermore, approval of the Application opens the possibility of commercial mineral extraction which would present far more extensive impacts to the environment.

### Trail Construction and Use

The Application includes construction and use of a 500-meter-long "trail" which would be used by four-wheel drive vehicles and equipment. This new trail in combination with the recently constructed new logging road it would connect to poses a threat to the environment. Depending on the conditions,

construction and use of forest roads/trails can cause severe environmental impacts, including surface erosion and sedimentation; pollution of on-site and downslope waters; slope failures and mass movement; direct loss of habitat removed in the road/trail corridor; and degradation of soils, riparian and wetland areas, as well as indirect loss of habitat due to noise disturbance and fragmentation of an ecosystem into smaller and more isolated patches. Increased accessibility of the area to humans can also lead to increased unmanaged recreation (such as unauthorized hunting, fishing, snowmobiling and other motorized off-road vehicle use), resulting in negative effects on fish and wildlife.

### Trenching

The trenching included in the Application could significantly impact the environment, depending on the amount of material removed and the types of materials exposed. The Application indicates the location, number of trenches, and total surface area impacted by trenching, but it does not indicate the depth of the trenches or the harmful subsurface materials potentially disturbed or exposed in digging them. The Application does not provide the total volume of material that would be excavated from the proposed trenches and test pits. This information is required in order to determine the impact on local soils and vegetation. Further, these excavation materials when exposed to heavy rainfall could become a source of sediment and toxic contaminants that would runoff into the local watershed, including Smitheram Creek. Moreover, an estimate of the total excavation volume for the trenches and test pits is not provided. Without this information the reclamation methods for the excavation and the appropriate cost of the reclamation cannot be determined.

### Drilling

The proposed exploratory drilling includes one or two 2,000 meter deep holes using a diamond drill bit. There is no information provided on the volume of material that would be excavated from these holes. The time required to complete the drilling is not provided in the Application, which is essential to understand how much water would be diverted to the drill site for cooling, and the duration of noise and mechanical disturbance to the local environment. Furthermore, the proposed exploratory drilling would require the use of a substantial amount of water for cooling the drill bit. There is no assurance in the Application that this water and associated sediments and heavy metal contaminants would not run back into Smitheram Creek and downstream into the Skagit River.

### Water Diversion

The proposed exploration project would require the diversion of substantial volumes of water at two locations in Smitheram Creek. The estimated rate of use is 0.20 cubic meters per second at each diversion site. Smitheram Creek is a small, fish-bearing stream that likely also provides habitat to sensitive amphibian species, including Pacific giant salamanders and tailed frogs. These proposed water diversions could potentially dewater areas of this stream during dry periods of the year. Measurements of streamflow in Smitheram Creek at the two diversion sites are not provided. Without these measurements, the full extent of the adverse effects of the diversions on the aquatic community in this stream cannot be determined.

### Settling Ponds

The settling ponds and water extraction methods included in the Application lack the inclusion of site-specific management provisions. This information is essential due to the location of the project site at or near the headwaters of Smitheram, Silverdaisy, and Twenty-six Mile creeks. These streams are an essential component of the upper Skagit watershed that drains into the US. A clear description of how wastewater and mine waste would be handled in the proposed work areas is lacking. Furthermore, the two settling ponds required for processing and treating drill-cooling water are described as below-grade sumps that are 3m x 5m x 2 m deep (i.e., 30 cubic meters in volume). These wastewater treatment facilities are very small in relation to the estimated rate of water flow into these ponds, which is 0.2 cubic meters per second at each pond (equivalent to 190,200 gallons per hour). At this rate of inflow, these water treatment facilities would become full in approximately 2.5 minutes. After this time, water would need to be recycled by a machine or exfiltrated into the ground. As proposed in the Application, it is unlikely that the two small settling ponds would have the necessary area and soil permeability to allow this amount water to infiltrate into groundwater. For this reason, much of the water used to cool the drills, along with associated sediments and contaminants, would likely flow back into Smitheram Creek via surface runoff. Any surface runoff involving this volume of water would likely result in local soil erosion that would then deliver contaminated sediment runoff into Smitheram Creek and ultimately the upper Skagit River. This outcome is contrary to the "Settling Ponds, Activities" section of the Application which indicates there will be no water from the ponds discharged into the environment.

### **INSUFFICIENT RECLAMATION**

As pointed out above, the Application lacks the accuracy and level of detail necessary to fully understand the impacts of the proposed exploratory mining in order to develop appropriate mitigation/reclamation, or to determine if acceptable mitigation/reclamation is even possible. No costs are included for the actions that would be required to control surface erosion and sediment runoff from the soil excavated from the trenches and test pits that would likely occur during periods of heavy rain. Nor are the costs of treating any surface water that would run off from the settling ponds at the drill sites included, and these costs would likely be substantial. According to BC's regional bond calculator and guidance document, *"British Columbia's world-class reclamation laws ensure that upon mine closure, land, watercourses and cultural heritage resources are returned to a safe and environmentally sound state."* Therefore, we expect that the BC Ministry of Energy, Mines, and Petroleum Resources will respond to these deficiencies appropriately and reject this Application.

### **IMPACTS TO RECREATION**

The Silverdaisy Area is important to recreational users. According to BC Parks, the Panhandle Park Road is used by bikers and hikers and the Silverdaisy Creek Trail is an important recreation resource for hikers in the area. Therefore, industrial traffic associated with the proposed activity along the park section of the Smitheram Road from Cayouse Flats and near specific work areas would risk visitor safety and negatively impact the experience of recreationists in the park and the Silverdaisy Area.

## IMPACTS TO CULTURAL RESOURCES AND FIRST NATIONS

Engagement with First Nations is important to ensure that impacts to cultural resources have been identified and adequately addressed. However, the Application states that Imperial Metals has not shared information or engaged with First Nations. We understand that engagement with First Nations is not required under the Mines Act, but it is encouraged. We support engaging with First Nations and hiring a cultural resource specialist to research and survey the proposed areas of impact. Without knowledge of culturally important sites, this permit should be rejected.

## ENVIRONMENTAL ASSESSMENT

In spite of the significant impacts listed above, we understand that no rigorous review of the environmental impacts of the Application has been or is planned to be completed prior to approving or rejecting this Application. Given the ecological sensitivity and international concerns of operating in the Silverdaisy Area, without a rigorous Environmental Assessment that identifies and evaluates the ecological, cultural (including First Nation), recreational, economic, and other effects of the requested activity, the Application should be denied.

## ERRORS AND OMISSIONS IN THE APPLICATION

Besides the deficiencies in the Application described above, some of the baseline information needed in the Application appears to be incorrect or missing as follows:

- Under Description of Work Program, the Application states that a 500-meter trail will be constructed *"from the last logging landing of a major logging road constructed in 2017/18"*. We were recently informed by the BC government that logging in the Silverdaisy Area is on indefinite hold and that these logging road(s) are currently being deactivated.
- Under Present State of Land, the Application states that the *"current logging activity (Interwest Timber Based in Lillooet) is extensive and more logging is planned in future seasons."* Again, we were informed by the BC government that logging in the Silverdaisy Area is on indefinite hold and that the associated roads are currently being deactivated.
- Under Land Ownership, the Application indicates that the activity is on Private Land. Our understanding is that all of the land involved in this Application is in public ownership (Crown land).
- Under Land Ownership, the Application indicates there will be no activities in the park. However, there would be heavy equipment traveling on roads located in the adjacent parkland.
- Under Settling Ponds, Activities, the Application indicates there will be no water from the ponds discharged into the environment; however, as mentioned above, it is highly unlikely that this is the case.
- The Application spans a period of five years; however, the activities proposed should take less than a year to complete. The extended timeframe greatly increases the duration of disturbance and would delay full restoration and recovery of the damaged area.

It is our understanding that applications for permits will be denied if the activities proposed in the application pose undue risk to the environment or cultural heritage resources and that these risks

cannot be reduced to acceptable levels through permit conditions. In the absence of a complete and accurate description of significant impacts and risks to the environment and cultural heritage resources and any proposed mitigation, this Application does not demonstrate that these resources could be adequately protected if the associated work proceeded. Given the high-profile nature of this work as well as the environmental and international consequences of moving forward, we submit that this Application should be denied before irreparable harm ensues.

We appreciate the opportunity to formally comment on Imperial Metals' Notice of Application, to fulfill our mutual obligations under our Treaty and Agreement, and to reaffirm our shared commitment to protect the upper Skagit watershed in perpetuity. We believe the only way to achieve this is to halt all resource extraction activities in the Silverdaisy Area immediately, restore the area into its natural condition, support SEEC in acquiring all mineral tenures in the Silverdaisy Area, and incorporate all lands associated with the tenures into the adjacent parks. If you have any questions or wish to discuss our comments, please contact Seattle City Light's Chief Environmental Officer Lynn Best at [lynn.best@seattle.gov](mailto:lynn.best@seattle.gov) or by phone at (206) 386-4586.

Sincerely,



Debra Smith  
General Manager and CEO  
Seattle City Light



Lynn Best  
Chief Environmental Officer  
Seattle City Light

CC:

Imperial Metals Corporation  
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